The Washington Board Journal

*Informing Professional Engineers and Professional Land Surveyors of the events and developments that affect their professions*

Number 48 • Fall 2011

## YOUR BOARD MEMBERS



# INSIDE:



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WASHINGTON STATE DEPARTMENT OF LICENSING

The Washington Board Journal

The Washington Board Journal is published biannually by the Washington Board of Registration for Professional Engineers and Land Surveyors, George A. Twiss, P.L.S., Executive Director.

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# Message from the Chair

*"The Message from the Chair" is a reflection of the personal opinions and experiences of the Board Chair. Comments in the article may be shared by various members of the Board, but they are not to be interpreted as a policy, position, or consensus of the Board unless specifically so indicated.*

**From Neil Arthur Norman, PE, C.Eng.**

This year the Board will be making an extra effort to communicate with the public and the engineering community about Engineers and Surveyors licensing in Washington. Our WA Law, RCW 18.43 states: "In order to safeguard life, health, and property, and to promote the public welfare …any person in public or private practice of engineering or surveying shall submit evidence that he is qualified to practice and shall be registered." In our Outreach we want to clarify the purposes of State licensing of engineers and surveyors, the process of registration of Professional Engineers and Surveyors, and the process of enforcement to include a comprehensive explanation of the complaint process. In the past, the Board staff and members have usually been able to respond to requests for presentations to groups, but this year we will initiate some of these contacts and make a more deliberate effort to bring our program to you.

For those of you who are our Licensed Stakeholders, the content of any outreach will address the specific issues you may have about changing requirements for testing, license renewal, continuing professional education, comity, and detail practice issues. Many of these questions are already being covered in this Journal, but more detail discussion, and response to questions in face to face meetings may be useful.

The Board supports expanded PE licensing where this can better assure Public Protection. For the broader population of non-licensed engineers, the message will be how licensing protects and serves them while meeting the public protection goals. Presentation to professional societies will be sought. You who are already licensed can help by facilitating such opportunities.

Public groups may know about licensing and certainly expect that all professionals should act in the public interest. Beyond that, the public may know little of the details about engineer and surveyor licensing. We believe that better understanding will facilitate enforcement, enhance the image of our profession and improve public confidence in our professional services.

Students in both K-12 and College are now encouraged to move toward careers in Science, Technology, Engineering, and Math to strengthen our society. We can promote this national and state priority by explaining what professional engineering and surveying careers are and the significant rewards they can bring to these students.

There seems to be a common misunderstanding among non-licensed engineers about whether licensing brings advantages to them if their licensing is not required

*Continues on page 17*

# News to You

## State SEIII Examination Is Administrated For The Last Time

Since June 1964 the Washington Board of Registration for Professional Engineers and Land Surveyors has offered a state specific examination to qualify engineers in structural engineering. On October 15th of this year the ongoing administration of that examination ended. From this point forward the Board will use the national structural examination developed through the National Council of Examiners for Engineering and Surveying (NCEES).

The development of and the Board's move to the new examination is seen as a significant milestone in the evolution of this licensing examination. The examination is the result of several years of work amongst member boards of the NCEES and volunteer consulting structural engineers from across the country that provided substantial time and expertise to the process. The result is an examination that is a balanced reflection of contemporary structural practice. States in high seismic areas, like Washington and California, were instrumental in assuring the exam content presented sufficient evaluation of a candidate's knowledge in seismic design. Equally important to states in the gulf and southern coastal areas was the inclusion of design considerations where high sustained winds must be addressed.

It also is important that the Board give its deep appreciation to the dozens of subject matter experts who have put so much effort in the many years when a national exam was not available. These volunteers were instrumental in making sure the state of Washington was able to offer an examination in structural engineering. Without those hours of contributions no structural examination would have been available to the Board.

As you might imagine, ensuring the existence of a quality examination is an effort that requires sustained commitment and leadership. The Board and the citizens in this state owe a debt of gratitude to Edwin Huston, PE, SE. Logging untold hours in coordinating the work here and traveling hundreds of times to distant locations to represent the interests of Washington State, Ed has invested an extraordinary portion of his career to the betterment of structural engineering practice. Yet, even with the end of our state exam in October, Ed's commitment continues. He remains an active participant in the development, item review and grading of the national SE exam.

## Psychometrician Leads Experts To Comprehensive Updating Of The State Land Surveying Examination

Starting in May, the firm of Ergometrics of Lynnwood, WA guided the efforts of 16 volunteers through the complicated tasks of reviewing, editing and writing of new items for the state's LS licensing examination. Licensed land surveyors from across the state contributed considerable personal time to ensure the effort was successful.

A significant part of the process was to look at each test item to make sure it was not only properly structured but was still correct in reflecting many statute changes over recent years affecting land surveying. Attention was also given to questions about GLO/BLM subject matter to update any items that were inconsistent with provisions in the new Manual of Instructions published in 2010.

The volunteers who participated did so to "give back" to the profession that has been their career for many years. Each deserves your thanks for the successful result of this program.

| | |
|---|---|
| **Melvin Garland** | **Ron Torrence** |
| **Scott Valentine** | **Gwen Gervelis** |
| **Aaron Blaisdell** | **Peter Brands** |
| **James Wengler** | **John Thatcher** |
| **Rick Notestine** | **Mike Hathaway** |
| **Richard Larson** | **James Coan** |
| **John James** | **Brian Portwood** |
| **David Icenhower** | **Allen Grissom** |
| **Justin Holt** | **George Twiss** |

*Continues next page*

## Incidental Land Surveying

As some of you know in 2007 the Board adopted a policy statement pertaining to when and under what circumstances a professional engineer could engage in practice that might be seen as within the scope of land surveying. The complete text of the policy is shown below.

Since 1947 the Board of Registration for Professional Engineers and Land Surveyors had instructed Professional Engineers that it was acceptable to the Board for engineers to perform a limited amount of surveying when such work was a direct part of the engineer's design responsibilities.

While there is little established written evidence in the form of an administrative rule, policy or position statement, there are articles where the Board has produced a general response to questions about this practice. That response was most often found in the Board Newsletter and Board Journal.

After thorough study of this subject involving input from stakeholders and comments from the office of the Attorney General, the Board has found that the relationship between some work of professional engineers and the practice of land surveying has a historical and logical connection. This connection is further illustrated by the fact that some professional engineers have had instruction in surveying techniques within the academic curriculum for an engineering degree.

**It is the Board's Position that it is an allowable activity for professional engineers to perform limited topographic surveying under the following conditions:**

1. *That the work performed is limited to the making of field measurements and mapping for the illustration of topographic features.*

2. *That the work performed by the professional engineer is developed for his or her own use toward the development of an engineered design.*

3. *That the work performed by the professional engineer is performed in a manner that is consistent with the topography's intended purpose.*

4. *That the professional engineer is competent and conversant in the techniques to correctly develop and map topographic information.*

The Board retains the right to investigate any and all complaints against professional engineers for alleged unlicensed practice of land surveying. However, if a professional engineer undertakes topographic mapping and does so in compliance with the four conditions outlined above, their actions will not be the basis for disciplinary action

The move to adopt this policy was, in part, prompted by the unintended conflict that was created when the state legislature enacted RCW 18.210 that created the On-site Wastewater Treatment System licensing program in 1999. In that law the scope of practice for a licensed designer included the authorization to perform topographic mapping as a part of their responsibilities and required competencies. In the enactment of chapter 18.210 RCW it also recognized that professional engineers licensed by the Board under the provisions of chapter 18.43 RCW were not required to obtain a designer's license. The conflict arose when one law would allow engineer's to perform topographic mapping and another law was not as clear.

Secondly, over the history of the Board dating back to the fifties, they have believed that it was a correct interpretation of the wording in chapter 18.43 RCW that the scope of engineering practice includes the ability of a professional engineer to perform topographic mapping that was for their use in site development designs. The basis of interpretation seems to come from the highlighted portions of RCW 18.43.020(5(a) :

*"Practice of engineering" means any professional service or creative work requiring engineering education, training, and experience and the application of special knowledge of the mathematical, **physical,** and engineering sciences to such professional services or creative work as consultation, **investigation, evaluation, planning,** design, and supervision of construction for the purpose of assuring compliance with specifications and design, in connection with any public or private utilities, structures, buildings, machines, equipment, processes, works, or projects.*

When taken together the two issues pointed to the need for the Board to put some clarity on how this overlapping scope of practice had to be defined.

Professional engineers need to take special note that this policy is not a blanket authorization to perform topographic mapping. Any such mapping must be for their own use and be a part of the design materials of the project for which they are responsible. Any such work outside the scope of the Board's policy will be subject to investigation and possible action by the Board.

## The Problems With As Builts

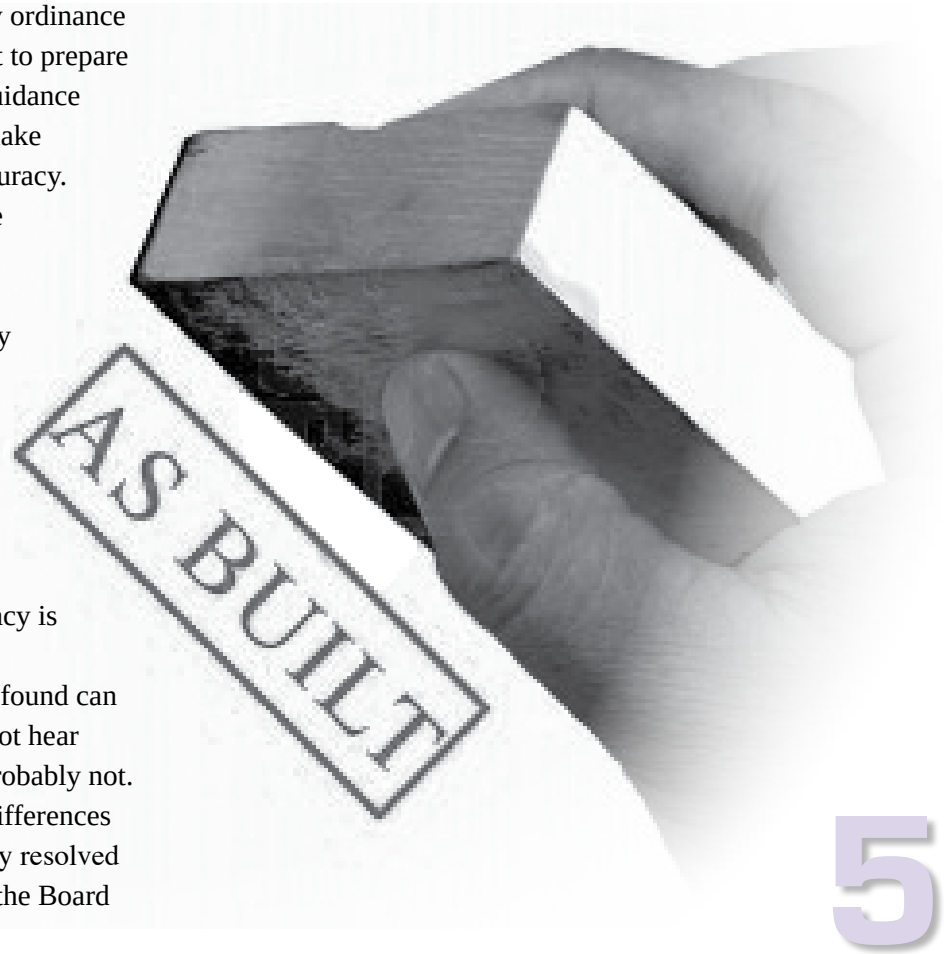
It is probably safe to say that most licensed engineers and land surveyors have had some experience in creating and/or using "record drawings" most commonly referred to as *"as builts."* Usually associated with construction projects, the "as built" drawings are intended to compile and document reliable information on the installed location of systems, utilities and components.

The Board has received questions from practitioners as well as regulators on "as builts". From the consultants we hear that the content requirements by the local agency are unclear. Local agency ordinance or regulation may set forth the requirement to prepare an "as built" but rarely provides enough guidance or instruction, so the consultant is left to make their own interpretation of content and accuracy. Sometimes this may be OK but if a dispute arises "finger-pointing" bogs down the resolution process. Conversely, from local agencies we hear that consultants do sloppy work by claiming that a plan is "as built" when the plan is actually a copy of the original design and no changes are noted even when it is known that changes have occurred, or that the positions shown for underground features are only, at best, an approximation and actual positional accuracy is unknown.

Since we only hear when a problem is found can we safely assume that the projects we do not hear about have all these issues worked out? Probably not. However, our experience shows that any differences of opinion on the final "as built" are usually resolved in a professional manner with no need for the Board to intervene. What then remains are those examples where the quality of the "as built" only vaguely depicts as-constructed conditions or worse.

The best fix for the problems seems simple. First, pre-construction discussions between the consultant and the local agency should cover what information and accuracy is required for the "as built" record. For instance, if a sewer improvement is the project, does the horizontal location of the manhole need to be shown? Does the invert elevation of all intersecting lines need to be measured and if so, to what accuracy? For an on-site wastewater system, should an "as built" show both horizontal and vertical information and if so, to what accuracy? However, in the absence of such discussions perhaps an alternative is for the local agency to publish a list of criteria that reflects what it is expecting.

Finally, it must be emphasized that all of this discussion has been directed to help identify where problems may surface and how to help well-intended individuals toward a practical solution. For those that willfully participate in a fraud by falsifying "as built" information, the Board will pursue the strongest possible sanctions. Remember, the seal and signature on an "as built" carries the same level of accountability as it does on the original design.



## Seattle University Civil Engineering Department Win 2011 NCEES Engineering Awards

Two Seattle University Civil engineering senior design projects were chosen for the 2011 NCEES Engineering awards. At a September 30th ceremony at Seattle University, members of the Board of Registration for Professional Engineers and Land Surveyors conveyed the awards on behalf of the National Council of Examiners for Engineering and Surveying. Each award included a monetary prize of $7,500.

One student team designed a replacement/retrofit option for existing maintenance walkway slabs above the sluice gate at Boundary Dam in northeastern

*Project Team for Structural Design of Dam Sluice Gate Walkway Slabs: Retrofit and Replacement Options.*

Washington for Seattle City Light. The other student team designed a diversion channel for flood control to assist a farming community in northwest Haiti that is devastated by frequent floods. This project was sponsored by Herrera Environmental Consultants.

The purpose of the competition is to recognize engineering programs that demonstrate a meaningful working partnership between professional practice and education and to promote the understanding and the value of professional licensure. The competition is open to ABET (Accreditation Board of Engineering and Technology) accredited engineering programs around the country.

*Project Team for Flood Control Channel Design for a River in Northwest Haiti.*

Seattle University's College of Science and Engineering senior capstone program is nationally renowned and has been in existence for almost 25 years. The year-long, industrially sponsored senior design projects provide an opportunity for the engineering seniors to work in a team setting under the close supervision of industry engineers and a faculty advisor to solve a real life engineering problem. In 2011 NCEES selected six projects for awards out of 26 submittals received from around the country. Seattle University is the first school to receive two awards in a single year and has received three overall since NCEES introduced the awards in 2009.

For more information on the awards visit, engineeringaward.com.

## Jans Begins Term As NCEES President

Dale Jans, P.E., of South Dakota, began his term as 2011–12 NCEES president at the conclusion of the NCEES annual meeting, held August 24–27 in Providence, Rhode Island.

Jans has served on the South Dakota Board of Technical Professions since 1994. A resident of Sioux Falls, South Dakota, Jans is president and majority owner of Jans Corporation, a design/build construction company based in South Dakota. He replaces outgoing President Joseph Timms, P.E., of West Virginia, who will remain on the NCEES board of directors as immediate past president.

Also during the annual meeting, NCEES members

elected Gene Dinkins, P.E., P.L.S., of South Carolina as its president-elect for the 2011–12 term and elected David Widmer, P.L.S., of Pennsylvania treasurer for the 2011–13 term.

NCEES also welcomed two new members of its board of directors in Howard (Skip) Harclerode II, P.E., of Maryland and Theodore Sack, P.L.S., of Oklahoma.

Harclerode and Sack will serve two-year terms as vice presidents of the Northeast Zone and Southern Zone, respectively.

Rounding out the board of directors are two members serving the second year of their two-year term: Nancy Gavlin, P.E., S.E., of Illinois returns as Central Zone vice president, and Patty Mamola, P.E., of Nevada continues as Western Zone vice president.

## NCEES Takes Additional Steps Toward CBT At 2011 Annual Meeting

At its 90th annual meeting, held August 24–27 in Providence, Rhode Island, the member licensing boards of NCEES approved a new pricing model for NCEES exams that will go into effect when the Fundamentals of Engineering and Fundamentals of Surveying exams shift to computer-based testing in January 2014.

The new pricing model, which features an all-inclusive fee for the FE and FS that covers the exam itself and administration costs, was a key step in the transition from paper-and-pencil toward computer-based administration.

The final paper-and-pencil administration of the FE and FS exams, which are taken by nearly 50,000 examinees throughout the United States and in several foreign locations each year, will take place in October 2013.

### About the exams

The FE exam is the first of two exams required for professional engineering licensure; it is designed to test students' knowledge of concepts learned while earning an accredited bachelor's degree in an engineering discipline. The FS exam is a similar exam designed for surveying licensure candidates.

The PE and PS exams, which are designed for candidates who have already passed the FE or FS and gained professional experience, will continue to be administered via paper and pencil for the foreseeable future.

"Adopting a new pricing model was just one of many steps needed as we move the FE and FS to CBT," said Jerry Carter, NCEES executive director. "We remain excited about the many enhancements CBT will provide for our exams and the testing experience for candidates."

### Alternate pathway for education voted down

Among other actions taken at last week's annual meeting was a decision by the member boards against adopting an alternate pathway toward fulfilling the Model Law 2020 education requirement for engineering licensure. This alternate pathway would have allowed candidates seeking a P.E. license to fulfill the education requirement via a combination of approved continuing education coursework, additional experience, and mentoring.

The Model Law 2020 requirement, which is set to go into effect in 2020 but is nonbinding in any state that does not incorporate it into its laws, calls for candidates seeking a P.E. license to complete an engineering master's degree or its equivalent. Currently, the Model Law requires P.E. candidates to complete an accredited engineering bachelor's degree.

### Proposed amendment takes aim at industrial exemption

NCEES member boards expressed their support for strengthening licensure's protections by applying them toward engineered products and systems. They approved charging the Committee on Uniform Procedures and Legislative Guidelines with amending the Model Law to require responsible charge of a licensed engineer over the engineering design of buildings, structures, products, machines, processes, and systems that affect the public's health, safety, and welfare. The proposed amendment is a response to provisions in many state laws, known as industrial exemptions, that exempt firms that manufacture products from requiring a P.E. to oversee their design.

Full details on all motions considered during the annual meeting will be included in the official minutes, which will be published later this fall.

## University Of New Mexico Wins 2011 NCEES Engineering Award

NCEES is pleased to announce that the University of New Mexico Department of Civil Engineering is the grand prize winner of the 2011 NCEES Engineering Award for Connecting Professional Practice and Education. The award jury met June 7, 2011, in Clemson, S.C., to select the $25,000 grand prize winner.

The department received the prize for its submission, Integrated Infrastructure Improvements for a Youth Scout Ranch. For the project, teams of civil engineering and construction management students worked with professional engineer mentors to design infrastructure improvements for a youth camp. Each team addressed one of four areas necessary for the camp's future growth and improved safety: drinking water and fire protection; drainage, erosion control, and emergency road access; wastewater collection and secondary treatment; and structural improvements, including a new pedestrian bridge and trading post.

The jury praised the project for incorporating various subdisciplines of civil engineering as well as construction management and for giving students "practical understanding of the routine work environment of practicing professional engineers."

The jury selected five additional winners to receive awards of $7,500 each:

- California State University, Los Angeles, Department of Civil Engineering

  *Connecting Professional Practice and Education through a Civil Engineering Capstone Project: Mud Flow Barrier*

- Lawrence Technological University Department of Civil Engineering

  *Civil Engineering Capstone Project and Recovery Park*

- Seattle University Department of Civil and Environmental Engineering

  *Flood Control Channel Design for a River in Northwest Haiti*

- Seattle University Department of Civil and Environmental Engineering

  *Structural Design of Dam Sluice Gate Walkway Slabs: Retrofit and Replacement Options*

- University of Texas at El Paso Department of Civil Engineering

  *Development of a Sustainable Infrastructure Management System for a City*

The NCEES Engineering Award recognizes engineering programs that encourage collaboration between students and licensed professional engineers. EAC/ABET-accredited programs from all engineering disciplines were invited to submit projects that integrate professional practice and education.

The winners were selected by a jury of NCEES members and representatives from academic institutions and professional engineering organizations.

"NCEES is committed to educating the next generation about the importance of technical competency and ethical practice in the engineering profession," said NCEES President Joseph Timms, P.E. "We hope this award will inspire other colleges to introduce similar collaborative projects that bring professional engineers and students together."

Profiles of the winning submissions are available online at engineeringaward.com.

## The Washington Board Journal Questions & Answers

### Engineering

**Question**

I work for a state agency and part of the design documents we prepare are defined as "right-of way" plans. These documents depict monuments, alignments and property boundaries much the same way as is represented in a boundary survey. Some

of my colleagues (professional engineers) believe that this is an engineering document and should be stamped by a professional engineer. I disagree. The right-of-way plan does not illustrate engineering design information, it is just a part of the overall package of plans that are combined on a project. Can you help clarify?

***Answer***

*In your question you ask about the certification of right-of-way plans by professional engineers. In state law, the only professional engineers that are specifically authorized to perform right-of-way type surveys are the County Engineers. Similar authority does not exist for professional engineers working for municipalities or state agencies. If the right-of-way plans you describe are being represented as boundary surveys of the right-of-way then that work must be performed under the direct supervision and stamped by a licensed land surveyor.*

## Land Surveying

**Question**

In recent research I studied a recorded plat that states iron pipes have been set for the lot corners. The controlling monuments shown on said plat exist and are within acceptable measurement limits. There is no evidence of encroachment, gaps or overlaps on the lot I am surveying. I did not find any existing lot corners and set rebars for the corners. Do I need to record a survey?

***Answer***

*YES. What you describe is a discrepancy from what is found in the public record and what your survey revealed. The recording of your survey would create a connection between the information on the plat (iron pipes) and what subsequent surveyors would find on the ground (your rebars). In this case, the documentation of the change from pipes to rebars is an important link in the chain of evidence.*

*RCW 58.09.090(d)(i) … a "discrepancy" is: "A non-existing or displaced original or replacement monument from which the parcel is defined and which non-existence or displacement has not been previously revealed in the public record." (emphasis provided)*

## On-site Wastewater Designers

**Question**

I am a Licensed Designer and, in these tough economic times, I am considering expanding my practice to include the Operation and Maintenance of On-site Sewage Systems. The Local Health Department says I must be licensed with them. I think they are wrong, and my Designer's license exempts me from their requirements. Am I right?

***Answer***

*NO. Your Designer's license authorizes you to investigate existing On-site Wastewater Systems and design possible replacement or repair. It does not give you the authority to install systems or to monitor the performance of such systems under operation and maintenance duties. You should check with the local health jurisdiction for their performance or credential requirements to perform installation or operation and maintenance services.*


This article provides information of administrative and court actions that have taken place in the US involving professional licensure. This information is provided to help educate readers on actions that were taken affecting a professional license. In this case, the summary is not about engineering or land surveying practice. It is about a licensee's obligation for renewing a license.

*Professional Licensing Report, vol. 22, numbers 3/4, September/October 2010.*
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*Continues next page*

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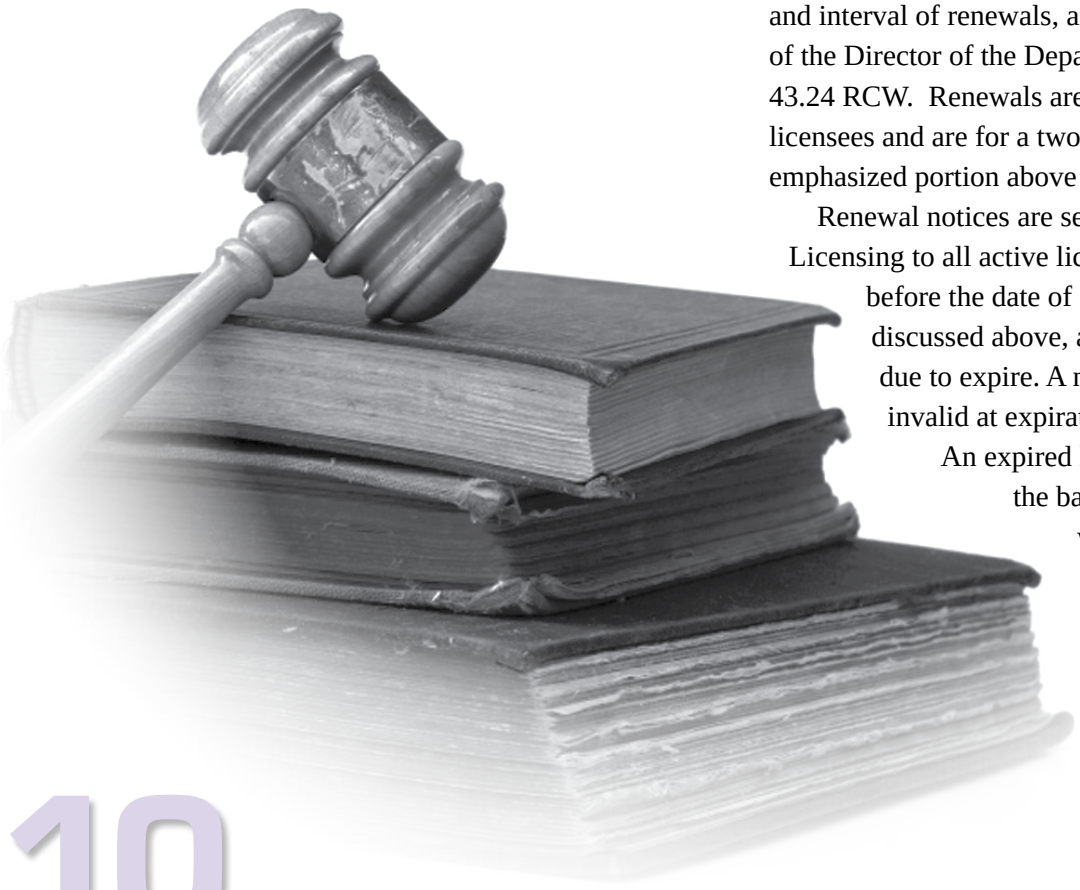
**Court Upholds Revocation for failure to renew on time**

*The license of a professional counselor who failed to renew within a year of expiration was properly revoked, even though no notice of the expiration was sent to the counselor by the board, the Court of Appeals of Texas held May 14 (Chris D. Riley v. Texas State Board of Examiners of Professional Counselors).*

*In an October 29 action, the Supreme Court of Texas refused to review the ruling.*

*The counselor, Chris Riley, was licensed for 19 years, but failed to perform the necessary actions to renew her license by December 31, 2002. She learned for the first time that she was no longer listed as a licensed professional counselor four years later. At that point, the board denied her request to renew based on her license's having been expired for a year or longer.*

*In a lawsuit, Riley argued that the board's denial of her renewal without first providing her notice of the expiration date violated her constitutional right to due process. Both a trial court and the appeals court agreed that the board was required to notify the licensee of an expiring license. But the notice serves "as a reminder, not a trigger for deadlines," the court said. "Pre-expiration notice ... is not a prerequisite to compliance" with the renewal requirement, the court held. The board's failure to provide notice "did not excuse, toll, or otherwise affect Riley's independent responsibility to comply with" the renewal requirement.*



## What does Washington Law say?

RCW 18.43.080 Expiration and renewals of certificates…

*Certificates of registration … and renewals thereof, shall expire on the last day of the month of December following their issuance or renewal and **shall become invalid on that date unless renewed.*** [Emphasis provided]

The provisions in this section, that define the date and interval of renewals, are superseded by the authority of the Director of the Department of Licensing in chapter 43.24 RCW. Renewals are due on the birthdates' of the licensees and are for a two year period. However, the emphasized portion above is still pertinent.

Renewal notices are sent by the Department of Licensing to all active licensees approximately 6 weeks before the date of expiration. These notices, like discussed above, are a reminder that a license is due to expire. A non-renewed license becomes invalid at expiration.

An expired license may be renewed for the basic fee if payment is made with 90 days of the date of expiration. After that point, a penalty fee is applied to execute a renewal. If you are licensed as a professional land surveyor you also have requirements for continued professional development.

## A Look Back

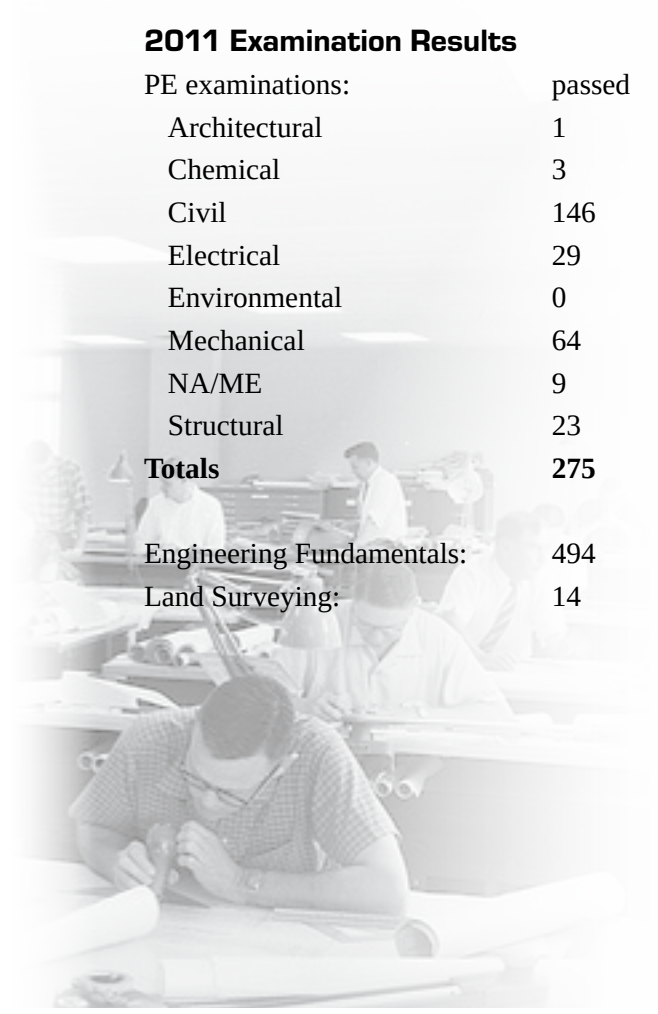
Sometimes it is interesting to look back in time and compare the activity of the Board from many years ago to the work done presently. Here is a scattering of data from June of 1962 compared to the recently completed examinations of April 2011.

### 1962 Examination Results

| PE examinations: | passed | failed |
|---|---|---|
| Chemical | 2 | 1 |
| Civil | 49 | 18 |
| Electrical | 20 | 7 |
| Hydraulic | 0 | 1 |
| Industrial | 3 | 0 |
| Marine Surveyor | 5 | 0 |
| Mechanical | 50 | 9 |
| Structural | 7 | 6 |
| **Totals** | **136** | **42** |
| | | |
| Engineering Fundamentals: | 281 | 95 |
| Land Surveying: | 18 | 5 |

### 2011 Examination Results

| PE examinations: | passed | failed |
|---|---|---|
| Architectural | 1 | 3 |
| Chemical | 3 | 1 |
| Civil | 146 | 89 |
| Electrical | 29 | 26 |
| Environmental | 0 | 6 |
| Mechanical | 64 | 28 |
| NA/ME | 9 | 0 |
| Structural | 23 | 51 |
| **Totals** | **275** | **204** |
| | | |
| Engineering Fundamentals: | 494 | 185 |
| Land Surveying: | 14 | 33 |



# Examinations

### April 2011 Examination Results

| | Total | Pass | % Pass |
|---|---|---|---|
| Fundamentals of Engineering (EIT) | 679 | 494 | 73% |
| | | | |
| Principles & Practice of Engineering | | | |
| Agricultural | 4 | 1 | 25% |
| Chemical | 4 | 3 | 75% |
| Civil | 235 | 146 | 63% |
| Electrical | 55 | 29 | 53% |
| Environmental | 6 | 0 | 0% |
| Mechanical | 92 | 64 | 70% |
| NA/ME | 9 | 9 | 100% |
| Structural | 74 | 23 | 31% |
| | | | |
| Fundamentals of Land Surveying (LSIT) | 29 | 9 | 31% |
| | | | |
| Principles & Practice of Land Surveying | | | |
| NCEES – 6 Hour | 23 | 22 | 96% |
| WA Specific L S (2-hour) | 47 | 14 | 32% |
| | | | |
| On-Site Designer | 3 | 2 | 67% |
| On-Site Inspector | 3 | 0 | 0% |

# Investigations & Enforcement

## Statistics of Actions Taken By The Board

### JANUARY 1, 2011 THROUGH JUNE 30, 2011

| | |
|---|---|
| Active investigations as of January 1, 2011 | 30 |
| Investigations Opened | 64 |
| Investigations Closed | 70 |
| Active Investigations as of June 30, 2011 | 24 |

### SUMMARY BY MONTH:

| | Complaints Received | Inquiries Received | Investigations Opened* |
|---|---|---|---|
| January | 16 | 0 | 16 |
| February | 3 | 0 | 3 |
| March | 15 | 0 | 15 |
| April | 10 | 0 | 10 |
| May | 10 | 1 | 10 |
| June | 10 | 1 | 10 |
| **Totals** | **64** | **2** | **64** |

*Investigations can be opened by either a complaint or an inquiry received.

### SUMMARY BY PROFESSION AS OF JUNE 30, 2011

| | Active Investigations | Legal Status | Compliance Orders |
|---|---|---|---|
| Prof. Engineers | 10 | 1 | 0 |
| Prof. Land Surveyors | 7 | 1 | 1 |
| Unlic. Engineers | 2 | 0 | 0 |
| Unlic. Land Surveyors | 0 | 0 | 0 |
| On-site Designers | 5 | 1 | 0 |
| **Totals** | **24** | **3** | **1** |

*Legal status refers to the investigations that the Case Manager has refered to legal for violations and the Board Order is in progress of being issued.*

## Summaries Of Investigations And Actions By The Board

The following case summaries cover the disciplinary actions against licensees from January 1, 2011 - June 30, 2011. In each disposition the Board accepted the recommendations of the case manager, unless stated otherwise. For those cases involving a Board order, each licensee may be monitored for compliance with the conditions imposed in the order.

The summary information provided under "INFORMAL ACTIONS" is provided to educate licensees on events and circumstances that come before the Board for investigation. In those cases no disciplinary action is taken because either the allegations are unsubstantiated, fall outside the scope of jurisdiction of the Board or it becomes unnecessary because of corrective measures taken. Any investigations that reveal clear and convincing evidence of wrongdoing, and where a Board Order is issued, will be listed under "FORMAL ACTIONS".

The decisions of the Board members who work as Case Managers of the investigations are based upon their personal opinions of the severity of the infraction and the best course of action to take to appropriately resolve issues. Interpreting any one or several dispositions as indicative of the Board's view of how all such cases will be handled in the future would be incorrect.

These summaries are not intended to disclose complete details related to any given investigation or action. While every effort is made to ensure accuracy of the information shown, anyone intending to make a decision based upon this information should contact Robert Fuller, Deputy Executive Director at (360) 664-1578 for more details.

## Formal Actions

### Engineering

#### Clifton Berkey, PE, Case No. 08-10-0014

The Board's investigation of Mr. Berkey was based on a complaint alleging that he failed to execute his duties in accordance with sound principles of engineering and performed work outside his area of

competency in regards to an engineering project and a lack of supporting calculations.

The case manager found Mr. Berkey performed his work incompetently and failed to meet the standard of care of a professional engineer. Based on that conclusion, the case manager authorized the issuance of Statement of Charges. After the issuance of the charge documents, Mr. Berkey provided additional information, including calculations and an explanation to the case manager. After evaluating this additional information, the case manager determined there was insufficient evidence to substantiate the charges against Mr. Berkey and the charges were withdrawn April 7, 2011.

### Land Surveying

#### Thomas Woldendorp, PLS, Case No. 10-04-0007

The Board's investigation of Mr. Woldendorp was based on a complaint alleging that he had performed approximately 100 surveys, collected the recordation fees from clients, but did not record the surveys.

In his response, Mr. Woldendorp acknowledged the complaint and narrowed the list of necessary projects that needed to be recorded to 65 stating that some of the projects were never undertaken or were at the proposal stage. He said that he intended to record all necessary Records of Survey by May, 2010.

As of early September, 2010, all of the required surveys had been recorded. Mr. Woldendorp stated that procedures have been put in place at his office to ensure that surveys are recorded in a timely manner.

After reviewing the investigation file, the case manager authorized the issuance of a Statement of Charges on March 1, 2011, and a settlement option in the form of a Stipulated Findings of Fact, Conclusions of Law, and Agreed Order. On March 24, 2011, Mr. Woldendorp accepted the settlement option with modifications and signed the Agreed Order. The terms of the Agreed Order included a $1500 fine that must be paid within 9 months of the effective date of the Order, and he must enroll, complete and pass the New Mexico State Surveying Ethics Correspondence Course within one year of the effective date of the Order.

On April 7, 2011, the Board accepted the Agreed Order.

## Informal Actions

### Engineering

#### Case No. 11-01-0004

This investigation was opened based on a complaint that alleged the Respondent failed to render engineering services in accordance with professional standards in the design of a pole building that suffered damage during a wind storm. The complaint stated the Respondent knowingly under-engineered a pole building structure which placed the complainant's life at risk. The complainant also alleged that the Respondent indicated on his website that he is a structural engineer.

The investigation revealed that the Respondent is a civil engineer that has been doing contract design work for a pole building contractor for several years. Windstorm damage occurred in November 2009 to a pole building for which the Respondent had provided design services. Subsequently there were legal proceedings which involved the contractor's insurance company as well as an independent engineering analysis of the original design. During the legal proceedings period, the Complainant apparently engaged his own investigator and another engineer for deposition purposes. It is understood that the building has since been repaired by the contractor and approved by the local building official. There were also accusations by the complainant regarding defects in a building addition as well as another building built by the same contractor, but there was no specific evidence that the Respondent was involved.

The Respondent provided a letter vehemently refuting each allegation. He cited industry standards and codes followed, provided rational, reasoned responses to technical issues raised by the Complainant, referenced the independent evaluation,

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and pointed out that the local building official had not considered the damage an engineering issue. The Respondent also pointed out that he was not even aware the building was damaged until several weeks later, after the repairs had been made.
Research by Board investigative staff found no evidence of the Respondent having a website wherein the title Structural Engineer is used.

Based on the investigation findings, the case manager felt that there was not clear, compelling, incontrovertible evidence the respondent conducted himself in an unprofessional manner or willfully provided design that that was not within the normally expected standard of care. Furthermore, no evidence was found that the Respondent promoted himself as a Structural Engineer.

### Case No. 11-03-0003

This investigation was opened based on information received by the Oregon State Board of Examiners for Engineering and Land Surveying alleging that the respondent falsely represented professional qualifications on his 2003 PE application.

The respondent had been licensed in Oregon since 2003, but the matter came to their attention as the result of a disbarment action against the Respondent in another state where "falsification of experience" information had been a factor. Serious discrepancies on the 2003 PE application were revealed that prompted action by the Board and an eventual agreed upon "Final Order" wherein the respondent's license was retired.

During the course of the investigation, the respondent indicated that he lives in another state, has not worked in Washington in the past 5 years, and was basically retired. The respondent stated that that he had no intent to practice in Washington again and he would forward a letter so advising the board along with his license document.

The case manager determined that there was evidence that the respondent misrepresented professional qualifications on several licensing applications. However, it was not clear whether the information was intentionally falsified or the respondent was negligently irresponsible, but the important nature and accuracy of such information should certainly have been recognized by the respondent. Considering that the respondent voluntarily and permanently surrendered his license to practice in Washington, no further action was necessary.

### Case No. 11-04-0007

This investigation was opened as a result of complaint alleging unprofessional conduct of the respondent regarding proposed duplication of fees previously paid for by the complainant.

The complainant engaged a PE, employed by the respondent to make a site visit and make verbal recommendations regarding geotechnical issues. The site review services were provided and paid for in 2009. Subsequent to that time, the complainant alleges that he requested a written report, but that the PE had died and the Respondent was now unfairly requiring additional fees for another site visit and a report.

It appeared that this is a contractual issue between the complainant and the respondent, which is out of the jurisdiction of the Board.

## Land Surveying

### Case No. 10-03-0010

This investigation was opened based on a complaint alleging unprofessional conduct and that the respondent performed an erroneous survey of the neighbor's property.

The respondent performed a survey of the subject property based on a legal description of record. The short plat referenced in the legal description did show several dimensions to what appeared to be the edge of water but also showed the edge of the water to have a winding alignment.

While the Case Manager did not necessarily agree with the surveyor's methodology, he could find no basis for discipline in this case. The record of survey documents show how the "shoreline" was

determined and adequately showed the results of the survey. Because the deed description is faulty, a professional judgment is necessary to survey the property. Both surveyors involved in this case exercised their right to use professional judgment and, as sometimes happens, differed in their results.

### Case No. 10-04-0006

This investigation was opened based on a complaint alleging the respondent performed an erroneous survey of the neighbor's property.

The respondent performed a survey of the subject property based on a legal description of record. The legal description requires interpretation of where the shoreline is. The short plat referenced in the legal description did show several dimensions to what appears to be the edge of water but also shows the edge of the water to have a winding alignment.

While the Case Manager did not necessarily agree with the surveyor's methodology, he could find no basis for discipline in this case. The record of survey documents show how the "shoreline" was determined and adequately shows the results of the survey. Because the deed description is faulty, a professional judgment is necessary in order to survey the property. Both surveyors involved in this case exercised their right to use professional judgment and, as sometimes happens, differed in their results.

### Case No. 10-10-0010

The Board received a complaint from a lot Line Adjustment application reviewer with concerns about the competence of the respondent. The complainant stated that he has reviewed several documents from the surveyor consistently filled with errors including leaving out existing structures and hardscapes (impervious surfaces), mislabels and incorrect spelling.

Several documents were included in the complaint documentation, including a copy of an e-mail from the complainant to an attorney representing one of the property owners showing the respondent did not utilize the city application requirements on the first preliminary submittal. Additionally, a copy of an e-mail from one of the property owners to the respondent dated a few days prior to submittal of the complaint concerned comments he had received from the complainant from review of the preliminary survey drawing which included necessity for hardscape calculations and setback distances to be shown, a dimension of unknown purpose explained, a incorrect bearing and a misspelling along with a sentence fragment to be corrected. Additionally, the same day as the formal complaint was signed, the complainant sent the respondent an e-mail outlining eight specific items necessary to amend, correct or make clear to comply with the city standards.

During the course of the investigation, it was found that the county previously sent this project back to the surveyor four times for corrections and that this is consistent with past performance by the respondent.

The respondent, working with the two property owners and their attorneys, prepared a preliminary Boundary Line Agreement survey to submit to the county. The county, after determination that the property was located in the city said that the application had to be made to the city. The respondent admits to spelling errors which were repeated by the paste and copy process and not labeling the parcels as shown on the title report claiming he did not have a copy of the report at the time of drafting. He was of the opinion that all of the hardscape location surveys, calculations and drafting for a 283 square foot parcel were not necessary.

The survey was recorded in December, 2010. A review of the survey drawing showed that street centerline monuments were utilized to determine the property lines, and some, but not all plat record information was shown. A review of several recorded surveys by others in this very large subdivision block show similar centerline monuments being the source of evidence and none of these surveys complete a survey around the entire block.



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A review of the respondent's work showed a lack of attention to checking details such as spelling and required information, however minor it may appear to the respondent. However, this did not rise to the level of formal action. The respondent was reminded that he should pay much closer attention to detail in future projects.

## On-site wastewater designers

### Case No. 10-05-0005

This investigation was opened based on a complaint alleging the respondent submitted an on-site sewage system design which contained erroneous information. The complainant alleged the respondent failed to contact the local sewer agency to determine if connection to the sewer system was required.

The respondent had submitted on-site septic designs with erroneous information. The respondent stated one did have typos and one had no check box on the application for a "modified" system. The local Health Department approved the system based on the application submitted. The respondent stated he believed the county regulations allowed for modification of a system without connection to the sewer being required.

The respondent provided a letter to the Board indicating that he had taken significant steps to modify procedures and change business policies to prevent these types of issues from happening again. The Case Manager noted that although there were some areas of concern, the proactive steps taken by the respondent showed appropriate concern for the public safety and welfare and recommended that this investigation be closed.

## Unlicensed Practice

### Case No. 10-08-0004 & 10-08-0005

This investigation was opened based on a complaint alleging the respondent submitted an altered geotechnical report without the permission or knowledge of the authoring engineer.

During the course of the investigation it was found the respondent admitted to altering the geotechnical report and submitted it for plan review. The respondent stated he had altered the report to save time and money. The respondent acknowledged it was a bad idea and agreed he would not do it again.

As this was a one-time incident and the respondent agreed not to do anything like this again, the Case Manager recommended that this investigation be closed with no further action. However, the respondent was informed that his statements and acknowledgements will be kept on file and should similar violations occur, this information may be used for future action by the Board.

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## Message from the Chair

because of exemptions. From my long experience with A&E practice firms, I saw that licensed engineers: were hired preferentially over non licensed applicants, often received a raise on becoming licensed, were preferentially promoted into positions of responsible charge, and were preferentially kept on staff when reductions in force occurred. This was true even though the bulk of contracts might have been industry or government contracts exempt from state licensing requirements.

There is another important advantage not obvious to many but providing valuable protection to both the licensed professionals and to their employers. "Professionals such as licensed professional engineers, physicians, attorneys, etc., are held to a professional liability standard (as opposed to a general liability standard) when performing professional services. In order to establish professional liability against such professionals, a party must demonstrate that the professional had a duty, breached that duty (professional standard of care), that there was causation (proximate cause) and that the individual was damaged (bodily injury, death, property damage). US courts generally require that all elements must be demonstrated in order to establish professional liability. In some cases, an individual professional may have breached a duty (professional standard of care), but the proximate cause of the injury was not the breach and therefore the professional would not be found liable. Similar situations might occur regarding issues of duty and damages." (1) Comments by Arthur Schwartz, J.D., 8-11-11. These significant protections are not afforded to the non-licensed practitioner.

As always, your comments are sought. We hope WA Professional Societies will invite Board Members and Executive Staff to come to meetings to discuss these ideas about outreach and public protection. We also offer to provide PowerPoint presentation for you to use in talking to engineering, student, and public audiences in your own communities. If you don't call us, we may call you.

Thanks for your Professionalism and service to the WA engineering community.

# Dignity and Respect

## Needed for Professional Discourse

BORPELS Members and staff are frequently asked to respond to or interpret WA Law, Board Rules, and licensee or citizen behavior that can have significant impact upon licensees and citizens practice, income, or image in the profession. Board Members and Staff try to be diligent, thorough, and sensitive to the parties in reaching decisions, but even though the decisions are the outcome of long discussions, careful consideration and focused strategic thinking they cannot meet with acceptance from all of those most interested.

Communications with Licensees and the public are designed to include polite and civil dialogue that will protect the dignity of each individual. We know that these considerations are necessary if the Board's charges are to be met. Respect for each other and for our respected professions is a necessary condition for achieving the Board's legal charges and providing successful protection of public health and safety.

In the recent past some decisions of the Board have generated heated and impassioned opposition. Such reaction is helpful when it is delivered with reasoned alternative views and rationale. It becomes counterproductive when the reaction brings with it personal attacks and threats to members of the Board or its staff. Regardless of whether one shares strong opposition to a Board action, there is no place in productive and constructive dialogue for rancor and abusive behavior. The Board members are vested with a considerable responsibility to apply their knowledge, skill and judgment in the application of the regulation of professional engineering and land surveying. They should be afforded the courtesy and respect for the personal and professional investment that such responsibility involves.

Much of our credibility as individual practitioners flows from the high respect and trust we receive from the public. We are expected to work together with civilized discourse to achieve sound engineering results that protect the public. Rancor and disharmony will damage this trust. The public expects and deserves a higher level of professionalism from us than they might expect from other occupations.

# Schedules

## Examination Schedule

### Spring 2012 Administration

| Examination | Type | Examination Date | Application Deadline |
|---|---|---|---|
| Civil, Electrical, Mechanical, Chemical, Environmental, Architectural, Naval Architect/Marine Engineering | NCEES | Friday<br>April 13, 2012 | Tuesday<br>January 17, 2012 |
| 16-hour Structural | NCEES | Friday & Saturday<br>April 13 - 14, 2012 | Tuesday<br>January 17, 2012 |
| Land Surveying (6-hour) | NCEES | Friday<br>April 13, 2012 | Tuesday<br>January 17, 2012 |
| Land Surveying (2-hour) | State | Friday<br>April 13, 2012 | Tuesday<br>January 17, 2012 |
| Fundamentals of Engineering & Fundamentals of Land Surveying | NCEES | Saturday<br>April 14, 2012 | Tuesday<br>January 17, 2012 |
| On-Site Wastewater Designer / Inspector Certification | State | Friday<br>April 13, 2012 | Tuesday<br>January 17, 2012 |

## 2011 - 2012 Calendar of Events

The following is a proposed calendar of the Board's meetings, examinations, and participating events through the end of 2011 and into the first half of 2012. The dates and locations noted for Board committee and Board meetings are subject to change without notice.

**DECEMBER**

| | | |
|---|---|---|
| 6-7 | Committee & Special Board Meeting | SeaTac |

**JANUARY**

| | | |
|---|---|---|
| 17-18 | Committee & Special Board Meeting | SeaTac |

**MARCH**

| | | |
|---|---|---|
| 14-15 | Committee & Special Board Meeting | SeaTac |

**APRIL**

| | | |
|---|---|---|
| 13-14 | Exams | various locations |

**MAY**

| | | |
|---|---|---|
| 9-10 | Western Zone Meeting | Jackson Hole, WY |

**JUNE**

| | | |
|---|---|---|
| 20-21 | Committee & Annual Board Meeting | SeaTac |

Board of Registration for Professional
Engineers and Land Surveyors
P.O. Box 9025
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